

## **Remarks**

Claims 30-38, 40-54, and 56-63 presently stand rejected. Claims 41-42 and 50-51 are cancelled herein. Claims 64-67 are new. Thus, with this filing, claims 30 - 38, 40, 43-49, 52-54, and 56-67 remain pending. Various claims are amended as shown. No new matter has been added. Entry of this amendment and reconsideration of the pending claims are respectfully requested.

## **Examiner Interview**

A telephonic interview was held on February 16, 2010 between the Examiner and Applicants' Representative. As noted in the Interview Summary mailed February 23, 2010, that Applicants' proposed amendments to claim 30, "introducing a bandpass filtering the down stream DOCSIS channel signal, and claim 33, introducing a programmable frequency converter, appear to overcome the art of record." In the Advisory Action mailed March 5, 2010, it was indicated that a new search would be necessary. Accordingly, this Amendment incorporates the proposed amendments into independent claims 30, 46, 53, 58, and 64 as well as dependent claim 33.

## **Claim Rejections – 35 U.S.C. § 103**

Claims 30 - 38, 40 - 54, and 56 - 63 were rejected under § 103(a) over various combinations of U.S. Patent No. 5, 729, 281 to Utsumi et al. ("Utsumi"), U.S. Publication No. 2002/0007490 to Jeffery, U.S. Patent No. 6,848,116 to Land ("Land"), U.S. Publication No. 2002/0091866 to Perlman ("Perlman"), U.S. Patent No. 6,188,871 to Kitamura et al. ("Kitamura"), U.S. Patent No. 5,699,105 to Chen et al. ("Chen"), U.S. Patent Application Publication No. 2002/0073431 to Nikolich, U.S. Patent Application Publication No. 2002/0019984 to Rakib et al. ("Rakib"), and U.S. Patent No. 5,600,364 to Hendricks et al. ("Hendricks").

In particular, claims 30 - 38, 41 - 54 and 57 were rejected over Utsumi in view of Jeffery in view of Land, further in view of Perlman. Claim 40 was rejected over Utsumi in view of Jeffery in view of Land, further in view of Perlman, as applied to claim 30, and further in view of Kitamura. Claim 46 was rejected over Utsumi in view of Jeffery, and

further in view of Land, and further in view of Perlman, as applied to claim 53, and further in view of Kitamura. Claim 58 was rejected over Jeffery in view of Rakib, further in view of Land. Claims 59 and 60 were rejected over Jeffery, in view of Rakib further in view of Land, as applied to claim 58, further in view of Nikolich. Claims 61 and 63 were rejected over Jeffery in view of Rakib further in view of Land further in view of Hendricks. Finally, claim 62 was rejected over Jeffery in view of Rakib further in view of Land further in view of Chen. Claims 41-42 and 50-51 are cancelled, thus rendering the rejections of claims 41-42 and 50-51 moot. Without any admissions that the references are proper, the rejections of claims 30-38, 40, 43-49, 52-54 and 56-63 are respectfully traversed.

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03.

Amended claim 30 now recites in pertinent part, “*filtering, by a bandpass filter, a downstream DOCSIS channel signal;*” and “combining by the local service module, the converted one of the plurality of video channels with at least one other video channel from the one or more multiplexed channel signals *and the filtered downstream DOCSIS channel signal* into a multiplexed signal to be received by an output diplexer in the local service module for transmission to the plurality of room interface units..”

Applicants respectfully submit that the combination of the references fails to teach or suggest the above recitation. Applicants respectfully direct the Examiner to paragraph [0036] of the published Specification as well as DOCSIS Channel Filter 64 and its configuration between power divider 52 and power combiner 60 of FIG.3 for support for the amendment.

On page 4 of the office action, the Examiner has acknowledged that the combination of Utsumi, Jeffery, and Land fails to “explicitly teach the bi-directional signals being DOCSIS signals and the frequency converter being a DOCSIS frequency converter.” To cure the deficiencies of Utsumi, Jeffery, and Land, the Examiner has cited modulator 292 as illustrated in FIG. 2a of Perlman as allegedly “converting the upstream DOCSIS signals using a DOCSIS frequency converter.” Whether or not modulator 292 can be characterized as the claimed frequency converter, Applicants respectfully submit that there is no teaching

in Perlman of “filtering, by a bandpass filter, a downstream DOCSIS channel signal;” and then “combining by the local service module, the converted one of the plurality of video channels with at least one other video channel from the one or more multiplexed channel signals and the filtered downstream DOCSIS channel signal into a multiplexed signal to be received by an output diplexer in the local service module for transmission to the plurality of room interface units..”

As can be seen from FIG. 2A, selectable protocol module 230 includes standard MPEG-2 logic 234 for processing multimedia cable/television channels and DOCSIS logic 235 for processing packetized data according to the DOCSIS standard. Both elements share Quadrature Amplitude Modulation (QAM) demodulation logic 236. The user Selection logic 251 selects either the MPEG-2 logic 234 or the DOCSIS logic 235 for processing the incoming multimedia content. Perlman does not include any teaching nor any reason for teaching “filtering, by a bandpass filter, a DOCSIS channel signal;” nor of “combining by the local service module, the converted one of the plurality of video channels with at least one other video channel from the one or more multiplexed channel signals and the filtered DOCSIS channel signal into a multiplexed signal to be received by an output diplexer in the local service module for transmission to the plurality of room interface units..”

Nor do the other references teach or suggest “filtering, by a bandpass filter, a DOCSIS channel signal;” or “combining by the local service module, the converted one of the plurality of video channels with at least one other video channel from the one or more multiplexed channel signals and the filtered DOCSIS channel signal into a multiplexed signal to be received by an output diplexer in the local service module for transmission to the plurality of room interface units.” Consequently, the combination of the references fail to teach or suggest all elements of claim 30 as required under M.P.E.P. § 2143.03.

Accordingly, Applicants respectfully request that the instant §103(a) rejection of claim 30 be withdrawn. Independent claims 46 and 53 include at least one or more similar or same nonobvious elements as independent claim 30. Accordingly, Applicants request that the instant §103(a) rejections of claims 46 and 53 be withdrawn.

Dependent claims 31 – 38, 43 - 45, 47 – 52, 54, 56 – 57, and 59 - 63 depend from claims 30, 43, 53, or 58 and are patentable over the art of record for at least the same reasons

as discussed above in connection with their respective independent claims, in addition to adding further recitations of their own.

### **New Claims 64-67**

New independent claim 64 recites in pertinent part, “a plurality of *programmable frequency converters* adapted to convert to a predetermined frequency, at least one of the plurality of video channels corresponding to the channel selection request.” Thus, new claim 64 incorporates in substance the subject matter discussed in the Interview of February 23, 2010. As noted above, the Interview Summary acknowledged that the “programmable frequency converter” of proposed dependent claim 33 (and now amended claim 33) did not appear to be taught by the cited art of record.

Note that the “programmable frequency converter” feature was previously included in now-cancelled claims 41 and 42. Applicants note that in rejecting previous claim 41 on page 6 of the Office Action, the Examiner has cited “Modulating portion 131” of Utsumi as corresponding to the previously claimed programmable converter. Applicants respectfully disagree. Applicants refer the Examiner to paragraph [0035] of the Applicants’ published Specification for an example of the differences between demodulators/modulators and a programmable converter, specifically, programmable frequency converter, as claimed. Note that there is no demodulating and re-modulating of the signal, simply a frequency conversion of the signal. Thus, among other advantages, the frequency conversion approach can maintain the spectral purity of the signal so as to allow stereo sound to pass through where possible.

Accordingly, Applicants respectfully submit that Utsumi fails to teach or suggest at least “a plurality of *programmable frequency converters* adapted to convert to a predetermined frequency, at least one of the plurality of video channels corresponding to the channel selection request.” Nor do the other references teach or suggest at least “a plurality of *programmable frequency converters* adapted to convert to a predetermined frequency, at least one of the plurality of video channels corresponding to the channel selection request.”

Applicants respectfully submit that new dependent claims 65-67 are patentable for at least similar reasons as discussed above in connection with their respective independent claims. Thus, Applicants respectfully request allowance of the claims.

## **Conclusion**

Applicants submit that all pending claims are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present paper, the Examiner is kindly requested to contact the undersigned at (206) 407-1561. If any fees are due in connection with filing this paper, the Commissioner is authorized to charge the Deposit Account of Schwabe, Williamson and Wyatt, P.C., No. 50-0393.

Respectfully submitted,  
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Date: March 15, 2010

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